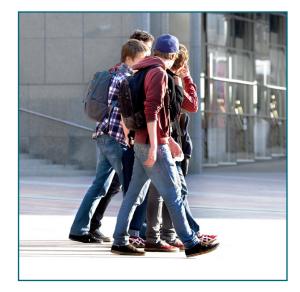
## Chapter 4.3:

# Pedestrian System Plan

## Introduction

Every trip, including transit and automobile trips, begins and ends with walking. Walking serves as a foundation for a successful transportation system by meeting significant urban center travel demand, providing efficient access to transit, connecting between neighborhood destinations, and creating a vibrant street life within the Redmond community. The pedestrian environment is as much about a sense of place (sidewalk cafes, spaces for events, gathering places for conversation, enjoying art and green spaces, and window shopping) as it is the most basic form of travel. An important part of the vision for this plan is creating a safe walkable Redmond both in the two urban centers and in all Redmond neighborhoods.



# Strategic Approach for Walkable Redmond

The overall transportation vision and transportation strategies rely heavily on a successful pedestrian system that is interwoven into an integrated multimodal transportation system to create a walkable Redmond. The pedestrian strategic approach to making Redmond more walkable is threefold: 1) create high-quality pedestrian environments in urban centers and light rail station areas; 2) complete a high-density, well-connected network of pedestrian facilities throughout all Redmond neighborhoods; and 3) improve the safety and comfort of all facilities including pedestrian crossings and increasing the separation of pedestrians from traffic. This approach fits with both the overarching transportation strategies and the citywide guiding principles.

#### **Transportation Strategies**

Downtown is rapidly becoming an urban center with a dense mix of land uses. Overlake is not far behind, as the planning is already in place to transform Overlake into the second Redmond urban center. Within these two urban centers, work, play, and home will be just a short walk away, as walking will become the most significant mode of travel for accommodating these growing centers. The travel forecast model reveals that from 2010 to 2030, walking (as a percentage of daily travel) will increase more than any other mode within the Downtown and Overlake urban centers.

The pedestrian realm (sidewalks, urban trails, etc.) will be at the core of these two important urban places within the Redmond community. Walking is also critical for automobile trips since finding parking directly in front of any store or business can present a challenge. By parking once and walking to various destinations on well-designed sidewalks and paths, the urban experience becomes less stressful. The quality of the pedestrian experience will largely determine how successful the City is in creating vibrancy and economic vitality in these two urban centers.

A walkable Redmond will act as the catalyst to improve all travel choices and overall mobility. Access to conveniently placed transit stops is simplest and most efficient by walking. For regional trips, walking

Every trip begins and ends with walking.

to East Link light rail will provide fast and inexpensive access for the many residents and employees in the two urban centers. The forecast of ridership by Sound Transit for the Overlake Village light rail station shows that about 33 percent of all riders will walk or bicycle to the station. Many others will be able to walk to one of the frequent feeder bus routes such as the Metro B-Line to directly access light rail without needing a car.

Walking is essential to creating the sense of community in neighborhoods, as children walk to school, people walk to parks, commuters walk to transit stops, and neighbors connect with neighbors along the trails, paths, and sidewalks. Improved connectivity creating more direct connections to desired destinations will significantly shorten walking times, particularly between cul-de-sacs (see Figure 38), making walking an attractive form of travel compared to the automobile for short trips. Walking also provides basic mobility for those who do not have the choice to drive, such as teens and the elderly.

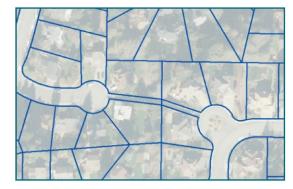


Figure 38. Connections help shorten travel distances

#### **Citywide Guiding Principles**

Walking improves economic vitality. Unlike all other modes of travel, there is not a direct cost for walking. The cost savings from walking are significant considering transportation costs are the second highest household expense in America next to the cost of housing.

Walking is also healthy for the individual and the environment. Walking and bicycling are the only forms of travel that combine exercise and transportation ("active transportation"), improving both personal and public health with no adverse impacts to the environment.

## Pedestrian System Development

Walking will be an attractive mode of travel by providing a pedestrian system with a dense network of sidewalks and trails that connect directly to destinations. The walking environment will be useful, safe, comfortable, and interesting, and will also enhance community character by activating the urban centers and tying neighborhoods together to create a walkable Redmond.

### **Pedestrian Priority Zones**

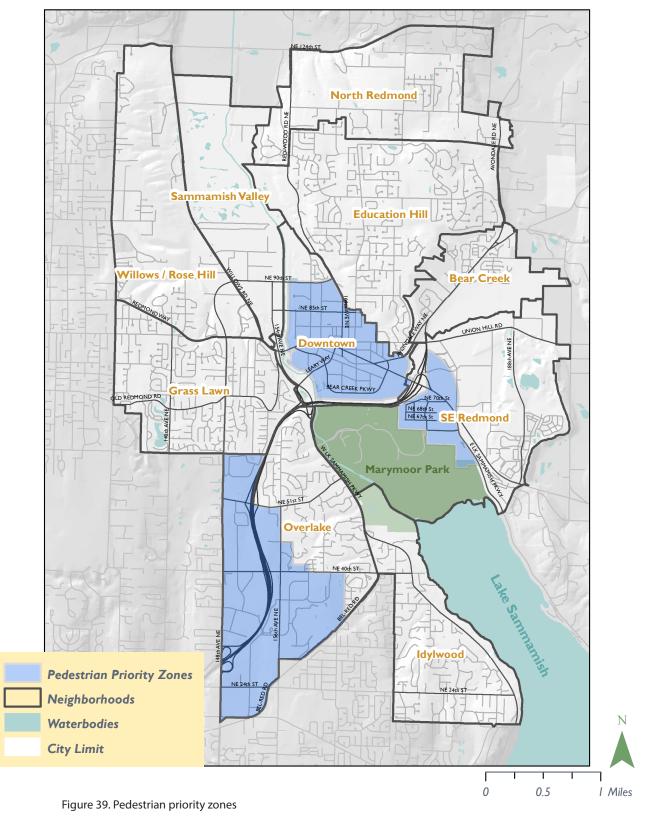
Urban walking environments will provide mobility for high numbers of pedestrians and form vibrant streetscapes that create a high quality of life in the Downtown and Overlake urban centers and near light rail stations as shown in the pedestrian zone map (Figure 39).

#### Main Streets, Shared Streets, and Linear Park Trails in the Urban Centers

In addition to wide and comfortable sidewalks on both sides of the streets in Redmond's two urban centers, there will be special streets and trails to enhance and promote the overall walking environment.

The pinnacle of the pedestrian system in the two urban centers will be the main streets. Connected into the main streets and urban street grid system will be shared streets (also known as woonerven — these low volume, low speed narrow alleys will serve pedestrians, bikers, and automobiles) and trails. Each urban center plan has specifically identified a pedestrian system of shared streets and trails to support the walking environment in concert with the street network. Pedestrian crossings will be frequent and relatively short throughout the urban centers. Crossings will be well marked with enhanced safety features such as beacons or signals as needed. Sidewalks will be wide and have furnishing zones, bicycle lanes, and/or on-street parking to provide buffers from automobiles and street noise.

## **Pedestrian Priority Zones**





Rendering of Cleveland Street in its future configuration as a pedestrian-oriented main street

Main streets, shared streets, and linear park trails offer distinct experiences that build off of one another. Main streets are a buzz of activity with shops, restaurants, sidewalk cafes, and pocket plazas for resting or people-watching. Shared streets offer larger pocket plazas that typically provide for sidewalk cafes or food carts. Automobile volumes and speeds are limited, inviting pedestrians to utilize the entire shared street. Linear park trails offer a relaxing recreational experience while also connecting into the vibrant urban experience, with spillover from the main streets.

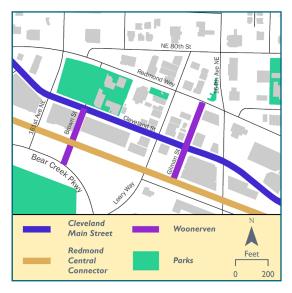
The close proximity of these facilities will create a memorable experience that draws in the Redmond community and regional visitors again and again.

#### **Sidewalks and Pathways**

Pedestrian facilities throughout the urban centers, such as sidewalks and interior pathways, will provide a wide, attractive pedestrian environment that provides a comfortable walking experience and creates a dense network of connections strategically linked with frequent, convenient crosswalks.

#### **Pedestrian Crossings Urban Areas**

Streets can be pedestrian barriers that add significant travel time for pedestrian trips. Frequent crossings will make streets more porous and



Central Downtown main streets, shared streets, and linear park trails

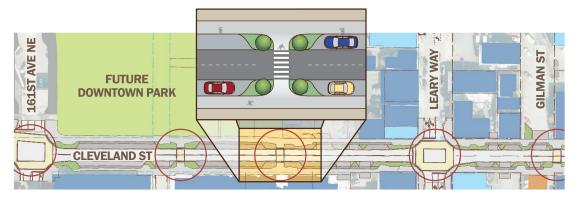


Figure 40. Pedestrian-friendly crossings in Downtown Redmond

easy to cross. The urban centers will include mid-block crossings to provide a finer-grained crossing network. Figure 40 illustrates a high crossing frequency with crossings placed at high demand crossing locations, while minimizing impact on automobile signal operations. Table 10: Pedestrian Crossing Design Standards in Appendix F provides further guidance.

Redmond's urban centers will have short crossings because of curb bulbs (see Figure 41) and tighter curb radii, making walking convenient and comfortable.

#### **Capacity**

A clear through walkway area of a sidewalk is needed to make walking comfortable. Figure 41 provides space for competing needs while providing a minimum through walkway width and minimum through walkway taper to ensure continuity of the through walkway. Further design guidance is included in Table 9: Sidewalk Design Guidance in Appendix F.

Figure 41 details the major elements of the pedestrian realm including:

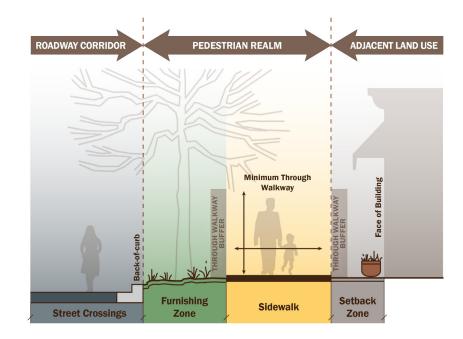


Figure 41. Cross section of the pedestrian realm

- Street crossings such as crosswalks at signalized intersections or mid-block crossings.
- Furnishing zones that may include street trees (typical in urban environments) or planter strips (standard in neighborhoods).
- Sidewalks with a minimum through walkway to enable comfortable walking.
- A setback zone that enhances the pedestrian realm by allowing elements like sidewalk cafes and building articulation.

## Residential and Mixed-Use Neighborhoods

Pedestrian facilities in neighborhoods will tie the community together by supporting safe and easy access to neighbors and community services like schools and parks, enabling greater pedestrian activity at community services, and enhancing neighborhood character by adding green to neighborhoods through landscaping and innovative stormwater treatments. Pedestrian improvements in neighborhoods will be focused on a more connected network of facilities that includes completing missing links, safe walk routes to schools, and meeting the particular needs of special population groups such as seniors and disabled persons. Providing for a safe pedestrian system to meet the needs of the most vulnerable populations makes for a safer and more comfortable pedestrian environment for all users.

#### **Network Connectivity**

Short trip lengths are essential to making walking an attractive travel mode. Therefore, a dense network of pedestrian facilities (sidewalks and trails) will tie neighborhoods together. Redmond will foster a partnership between

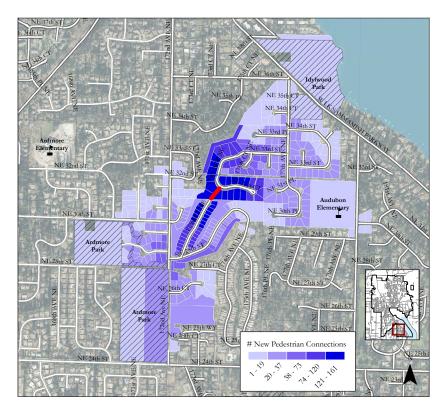


Figure 42. Walkability benefits of the NE 31st Court Trail

the City, land owners, business owners, developers, and others to implement this highly connected pedestrian system that includes direct linkages to adjacent streets and trails, and connects cul-de-sacs together. Figure 42 is an example of a short new connection between NE 31st Court and 173rd Court NE, which improves connectivity between a relatively big residential area and Audubon Elementary School. This project was prompted by requests from students.

Table 8: Network Connectivity in Appendix F provides guidance on how the pedestrian system should be implemented to improve neighborhood connections.

Redmond's extensive network of trails will be improved for pedestrian connectivity, changing over time from having very few access points to having a high number of access points. This will dramatically increase the transportation value of the trail network by supporting the short trip lengths that pedestrians require to flourish.

#### **Pedestrian Crossings in Neighborhoods**

With more modest pedestrian volumes, crossing location in the neighborhoods will focus on providing access to community services (includes access to transit, churches, schools, and parks). Crossing higher volume streets can be a challenge because signalized crosswalks are often widely spaced. To improve access to community services, additional safe mid-block crossings will be installed, and existing mid-block crossings will be improved as needed. This greater frequency of safe pedestrian crossings will encourage the number of people walking within neighborhoods.

#### **Capacity**

Sidewalk widths in neighborhoods will provide a basic width for safe and comfortable walking that is appropriate for the anticipated level of pedestrian activity. Five feet provides space for two people to

comfortably walk side by side and is the standard on local streets with lower automobile volumes. Areas with community services like schools, parks, and bus stops are likely to see heightened pedestrian activity levels, and will include greater sidewalk widths.

#### **Americans with Disabilities Act (ADA)**

The pedestrian system will be designed to provide mobility for all. Public and private investment supports the transition to a pedestrian system that is usable for the mobility impaired, including design treatments, such as curb ramps.

This approach also supports the City's compliance with the federal Americans with Disabilities Act (ADA). In order to ensure ADA compliance, the City will maintain its ADA transition plan.

#### **Prioritizing Investments for a More Walkable Redmond**

Many existing streets in Redmond were originally built without pedestrian improvements. The City is addressing this issue by funding a sidewalk program that builds pedestrian facilities, but funding levels and physical constraints will not allow the City to catch up and ensure sidewalks on both sides of each street by 2030.

Redmond will prioritize filling in sidewalk gaps based on safety needs and pedestrian trip generators that include transit stops, light rail stations, schools, parks, and other high generators. The 2030 goal is to complete sidewalks on both sides of every public street in the urban centers, adding sidewalks on at least one side of arterials, and building sidewalks on local streets where there is a

sidewalks on at least one side of arterials, and building sidewalks on local streets where there is a notable benefit to neighborhood connectivity. Investments will be mixed between the urban centers and the neighborhoods.

The City will carefully track progress toward increased walking in the urban centers and neighborhoods through innovative measurement tools like connectivity analysis to help assure the best use of public funds in pedestrian system investment.

#### **Implementation**

The vision for the pedestrian system will be achieved by:

- Creating high-quality pedestrian environments in the Pedestrian Zones (Downtown and Overlake urban centers and light rail station areas);
- Completing a high-density, well-connected network of pedestrian facilities throughout all Redmond neighborhoods; and
- Improving the safety and comfort of pedestrian crossings and separation of pedestrians from traffic.

Two key action steps towards achieving the vision are:

- Three Year Action Plan item #4: Reconcile Zoning Code with TMP Update.
  - Update the Downtown pedestrian system map and standards to enhance connectivity and encourage urban style activity and design.
- Three Year Action Plan Other Activities item #5: Regional Trail
  Access Study will help identify new connections that have the ability to
  significantly improve the usability of the pedestrian system, particularly in
  neighborhoods.

A network of pedestrian connections helps bring neighborhoods together.



Physical improvements to the pedestrian system will be completed through a three-pronged approach:

- 1) Transportation Facilities Plan Key projects include:
  - Cleveland Streetscape
  - Overlake Village Pedestrian & Bike Bridge
  - SR 520 Trail Grade Separation at NE 51st Street
- 2) Private development will build complete streets including pedestrian facilities. Key projects include:
  - Completion of the new street and pedestrian grid in Overlake Village
  - Overlake Transit Center Pedestrian & Bike Bridge
  - 152nd Avenue NE Main Street Phase 1 (East)
  - 152nd Avenue NE Main Street Phase 2 (Completion between NE 24th Street and NE 31st Street)
- 3) Annual Pedestrian Program will fund completion of high priority pedestrian facility needs. Investment will be focused on completing missing links, improving safety, and providing for needs of the greatest generators of pedestrian traffic (e.g., pedestrian zones, schools, parks, transit stops, and others).



Architectural rendering of the future Overlake Village pedestrian-bicycle bridge